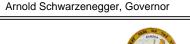
#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008663 Address: 333 Burma Road **Date Inspected:** 25-Aug-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Wu Zhi Cheng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Segments

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

**OBG Trial Assembly Yard** 

Segment 5BW/5CW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as EP038-001-013, 014. The welder is identified as #202841 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2-F.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW5-011. The welder is identified as #068091 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2213-B-U2-FCM.

This QA Inspector observed back gouging of the root pass of the bottom plate transverse splice.

## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Segment 5CW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SEG25C-005, 006. The welder is identified as #220067 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as CA022-005. The welder is identified as #049769 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM.

Segment 5BW

This QA Inspector observed drilling of bolt holes on the flange of bottom plate and side plate T-stiffeners for the 5AW/5BW bolted splice connection.

This QA Inspector observed arc gouging of the root pass of the side plate to bottom plate CJP splice weld, cross beam side. The weld joint is being re-welded after being cut due to out of tolerance dimensions.

Segment 5BE

This QA Inspector observed drilling of bolt holes on the flange of bottom plate and side plate T-stiffeners for the 5AE/5BE bolted splice connection.

Segment 2BW

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing (MT) on bevel end repaired areas along the bottom plate and side plate along the 2BW/3AW transverse splice location.

Segment 2AW

This QA Inspector observed trimming of side plate stiffener ends by torch along the stiffener to stiffener bolted splice connection of 1BW/2AW.

Segment 1BW

This QA Inspector observed grinding of weld repairs on the bottom plate I-rib bevel ends along the 1BW/2AW splice connection.

Segment 1AW/1BW

This QA Inspector observed ABF personnel performing Ultrasonic Testing (UT) along the CJP transverse splice welds of bottom plates and side plates, testing in progress was for transverse indications.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

ZPMC Quality Control (QC) Inspector is identified as Wang Li Yang. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

No relevant conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer